FIG. 1

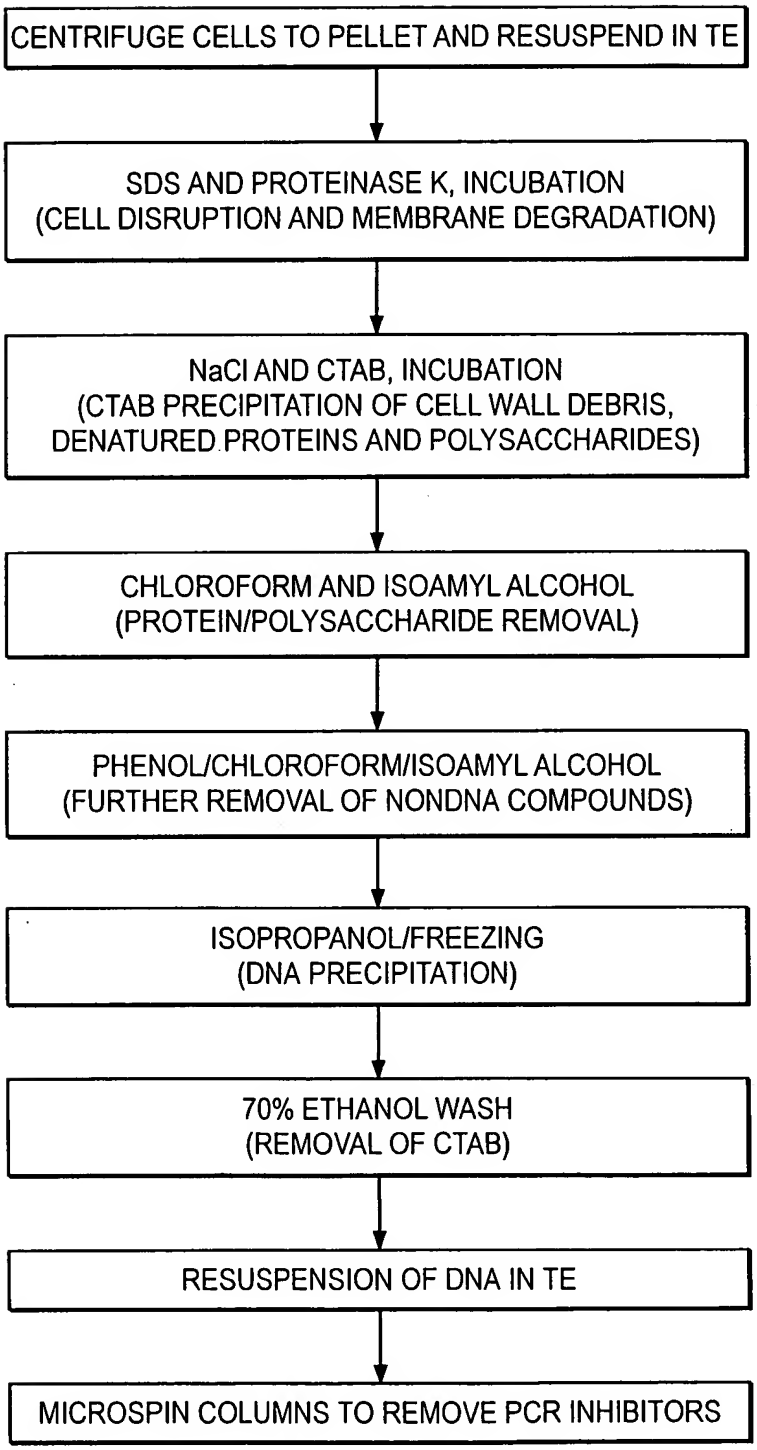

FIG. 2

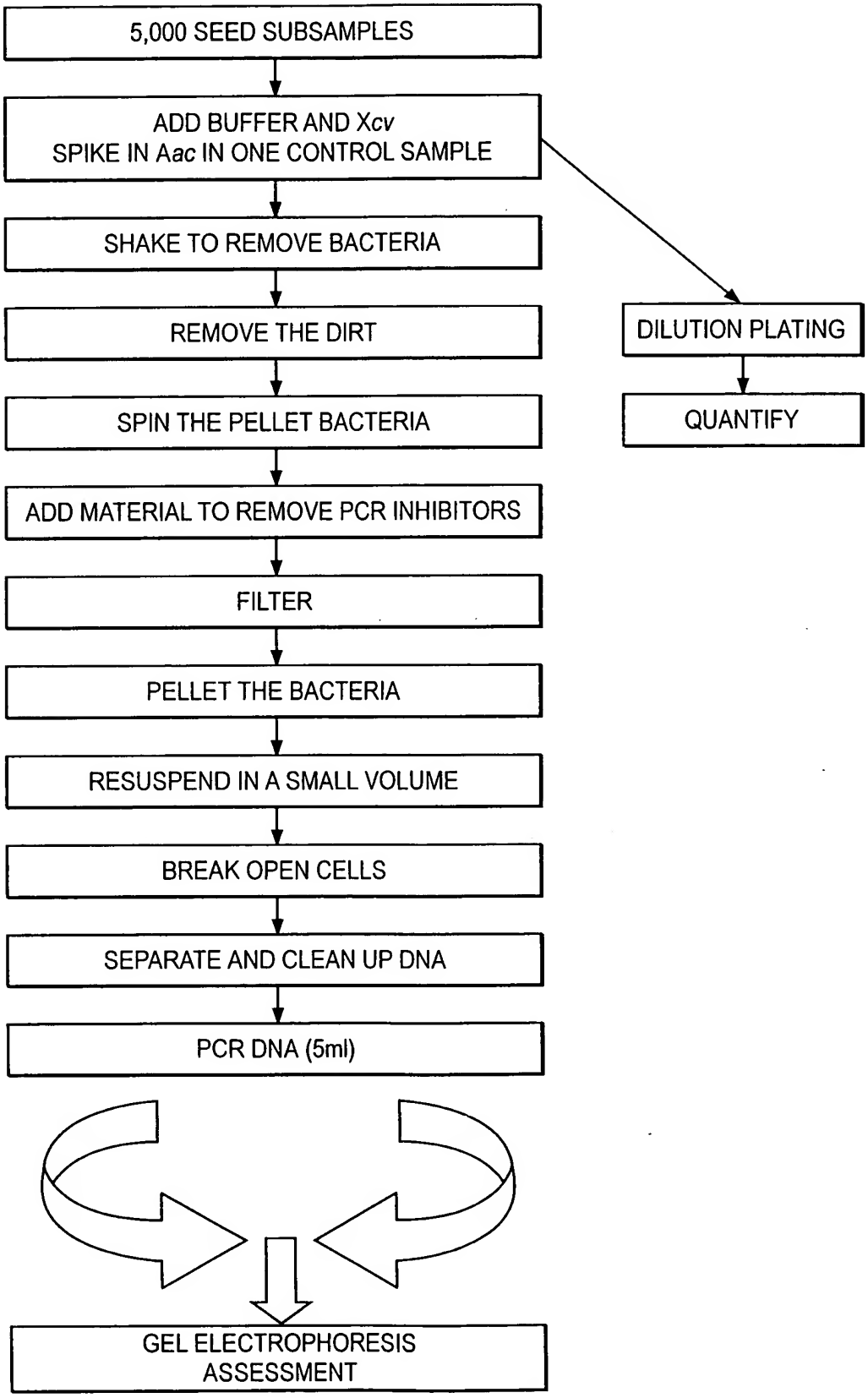
5,000 SEED SUBSAMPLES
ADD BUFFER AND Xcv
SPIKE IN Aac IN ONE CONTROL SAMPLE
SHAKE TO REMOVE BACTERIA
REMOVE THE DIRT
SPIN THE PELLET BACTERIA
ADD MATERIAL TO REMOVE PCR INHIBITORS
FILTER
PELLET THE BACTERIA
RESUSPEND IN A SMALL VOLUME
BREAK OPEN CELLS
SEPARATE AND CLEAN UP DNA
PCR DNA (5ml)
GEL ELECTROPHORESIS
ASSESSMENT
DILUTION PLATING
QUANTIFY

FIG. 3a

Bacterial Fruit Blotch

Disease screen assay data sheet
WFB PCR #

Electrophoresis information
Gel Concentration: 2.0% Buffer: 0.5X TBE Amount of agarose used; 2.5g, 5.0g, (7.0g), other____ (circle one)
Volts: 97 Watts: 8 mAmps: 92
On: 1:45 Off: 3:15 Temp: RT

Volume of DNA sample: 5µls Total reaction volume: 50µls

Gel Lane	Aac Result	Xcv Result	Gel Lane	Aac Result	Xcv Result	Gel Lane	Aac Result	Xcv Result
1. 1 Aac Rxns	-		37. 17	+		73. 11		+
2. 1	-		38. 18	+		74. 11		+
3. 2	-		39. 18	+		75. 12		+
4. 2	-		40. 19	-		76. 12		+
5. 3	-		41. 19	-		77. 13		+
6. 3	-		42. 20	+		78. 13		+
7. 4	-		43. 20	+		79. 14		+
8. 4	-		44. H_2O	-		80. 14		+
9. 5	-		45. H_2O	-		81. 15		+
10. 5	-					82. 15		+
11. 6	-		46. TE	-		83. 16		+
12. 6	-		47. TE	-		84. 16		+
13. 7	-		48. DNA Hi	+		85. Ladder		
14. 7	-		49. DNA Hi	+		86. N/A		
15. 8	-		50. DNA Low	+		87. 17		+
16. 8	-		51. DNA Low	+		88. 17		+
17. Ladder			52. 1		+	89. 18		+
18. 9	-		53. 1		+	90. 18		+
19. 9	-		54. 2		+	91. 19		+
20. 10	-		55. 2		+	92. 19		+
21. 10	-		55. 3		+	93. 20		-
22. 11	-		57. 3		+	94. 20		-
23. 11	-		58. 4		+	95. H_2O		-
24. 12	-		59. 4		+	96. H_2O		-
25. 12	-		60. 5		+			
26. 13	-		61. 5		+	97. TE		-
27. 13	-		62. 6		+	98. TE		-
28. 14	-		63. 6		+	99. DNA Hi		+
29. 14	-		64. 7		+	100. DNA Hi		+
30. 15	-		65. 7		+	101. DNA Low		+
31. 15	-		66. 8		+	102. DNA Low		+
32. 16	-		67. 8		+	103.		
33. 16	-		68. Ladder			104.		
34. Ladder			69. 9		+	105.		
35. N/A			70. 9		+	106.		
36. 17	+		71. 10		+			
			72. 10		+			

Note: All samples are tested at a 1:50 dilution of the recovered (stock) DNA. NTC is a No Template Control

Sample#'s	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12	13 & 14	15 & 16	17 & 18
Positive									✓
Negative	✓	✓	✓	✓	✓	✓	✓	✓	

BFB-PCR SEED HEALTH TESTING-50RXNS (20 SAMPLES)

PCR #: 975

FIG. 3b

ACIDOVORAX REACTIONS

XANTHOMONAS REACTIONS

	1	2	3	4	5	6	7	8	9	10	11	12
A	#1	#1	#9	#9	#17	#17	#1	#1	#9	#9	#17	#17
B	#2	#2	#10	#10	#18	#18	#2	#2	#10	#10	#18	#18
C	#3	#3	#11	#11	#19 SEED CONTROL	#19 SEED CONTROL	#3	#3	#11	#11	#19 SEED CONTROL	#19 SEED CONTROL
D	#4	#4	#12	#12	#20 SEED CONTROL	#20 SEED CONTROL	#4	#4	#12	#12	#20 SEED CONTROL	#20 SEED CONTROL
E	#5	#5	#13	#13	-H_2O CONTROL	-H_2O CONTROL	#5	#5	#13	#13	-H_2O CONTROL	-H_2O CONTROL
F	#6	#6	#14	#14	-TE CONTROL	-TE CONTROL	#6	#6	#14	#14	-TE CONTROL	-TE CONTROL
G	#7	#7	#15	#15	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac	#7	#7	#15	#15	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac
H	#8	#8	#16	#16	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac	#8	#8	#16	#16	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac

FIG. 3c

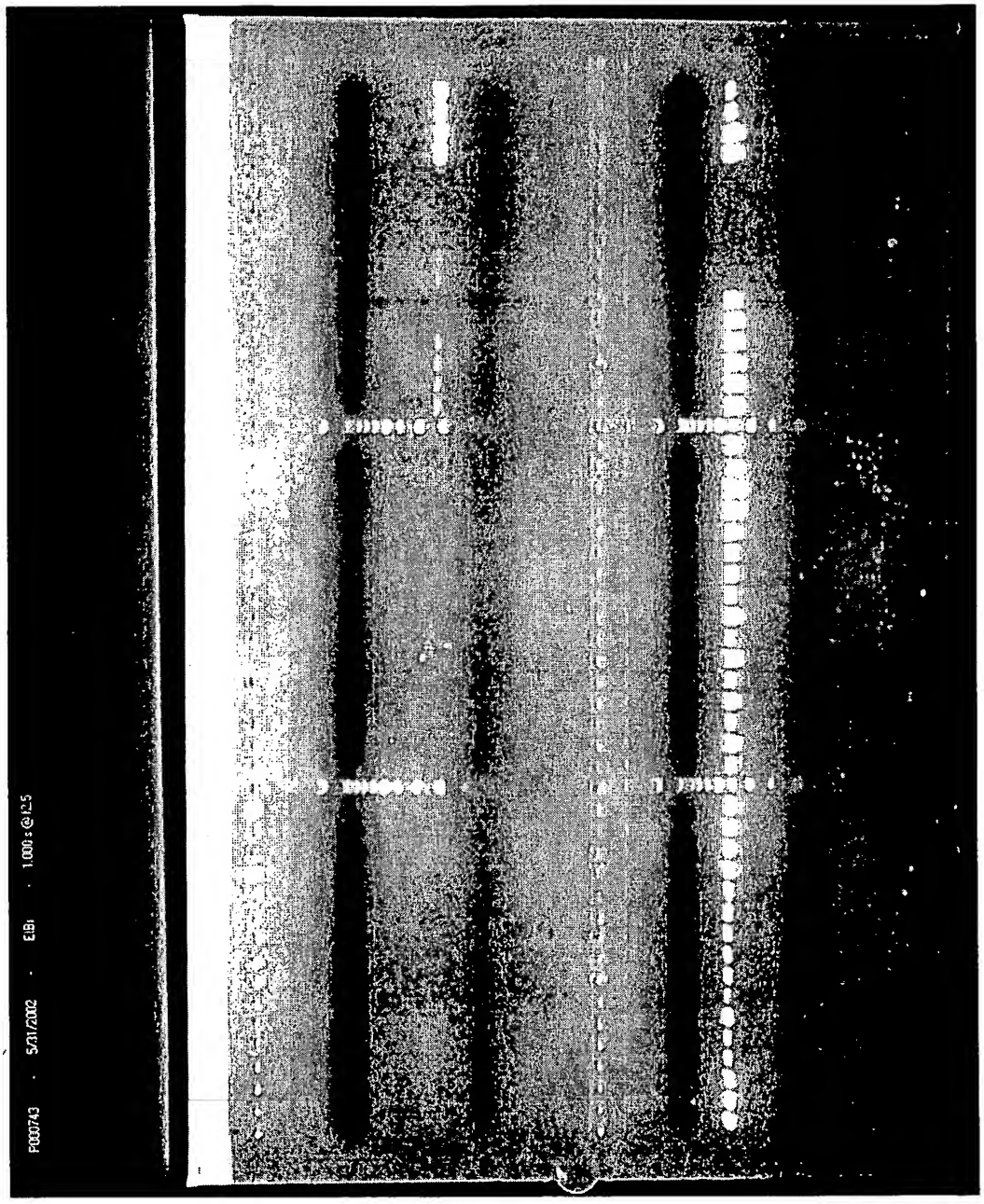

FIG. 4a

Bacterial Fruit Blotch

Disease screen assay data sheet
WFB PCR # 980

Electrophoresis information
Gel Concentration: 2.0% Buffer: 0.5X TBE Amount of agarose used;
Volts: 98 Watts: 8 mAmps: 94 2.5g, 5.0g, (7.0g), other____
On: 1:30 Off: 3:00 Temp: RT (circle one)

Volume of DNA sample: 5µls Total reaction volume: 50µls

Gel Lane	Aac Result	Xcv Result	Gel Lane	Aac Result	Xcv Result	Gel Lane	Aac Result	Xcv Result
1. 1 Aac Rxns	-		37. 17	-		73. 11		+
2. 1	-		38. 18	-		74. 11		+
3. 2	-		39. 18	-		75. 12		+
4. 2	-		40. 19	-		76. 12		+
5. 3	-		41. 19	-		77. 13		+
6. 3	-		42. 20	+		78. 13		+
7. 4	-		43. 20	+		79. 14		+
8. 4	-		44. H_2O	-		80. 14		+
9. 5	-		45. H_2O	-		81. 15		+
10. 5	-		46. TE	-		82. 15		+
11. 6	-		47. TE	-		83. 16		+
12. 6	-		48. DNA Hi	+		84. 16		+
13. 7	-		49. DNA Hi	+		85. Ladder		
14. 7	-		50. DNA Low	+		86. N/A		
15. 8	-		51. DNA Low	+		87. 17		+
16. 8	-		52. 1		+	88. 17		+
17. Ladder			53. 1		+	89. 18		+
18. 9	-		54. 2		+	90. 18		+
19. 9	-		55. 2		+	91. 19		+
20. 10	-		55. 3		+	92. 19		+
21. 10	-		57. 3		+	93. 20		-
22. 11	-		58. 4		+	94. 20		-
23. 11	-		59. 4		+	95. H_2O		-
24. 12	-		60. 5		-	96. H_2O		-
25. 12	-		61. 5		-	97. TE		-
26. 13	-		62. 6		+	98. TE		-
27. 13	-		63. 6		+	99. DNA Hi		+
28. 14	-		64. 7		+	100. DNA Hi		+
29. 14	-		65. 7		+	101. DNA Low		+
30. 15	-		66. 8		+	102. DNA Low		+
31. 15	-		67. 8		+	103.		
32. 16	-		68. Ladder			104.		
33. 16	-		69. 9		+	105.		
34. Ladder			70. 9		+	106.		
35. N/A			71. 10		+			
36. 17	-		72. 10		+			

Note: All samples are tested at a 1:50 dilution of the recovered (stock) DNA. NTC is a No Template Control

Sample#'s	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12	13 & 14	15 & 16	17 & 18
Positive									
Negative	✓	✓	✓	✓	✓	✓	✓	✓	✓

BFB-PCR SEED HEALTH TESTING-50RXNS (20 SAMPLES)

PCR #: 980

FIG. 4b

ACIDOVORAX REACTIONS

XANTHOMONAS REACTIONS

	1	2	3	4	5	6	7	8	9	10	11	12
A	#1	#1	#9	#9	#17	#17	#1	#1	#9	#9	#17	#17
B	#2	#2	#10	#10	#18	#18	#2	#2	#10	#10	#18	#18
C	#3	#3	#11	#11	#19 SEED CONTROL	#19 SEED CONTROL	#3	#3	#11	#11	#19 SEED CONTROL	#19 SEED CONTROL
D	#4	#4	#12	#12	#20 SEED CONTROL	#20 SEED CONTROL	#4	#4	#12	#12	#20 SEED CONTROL	#20 SEED CONTROL
E	#5	#5	#13	#13	-H_2O CONTROL	-H_2O CONTROL	#5	#5	#13	#13	-H_2O CONTROL	-H_2O CONTROL
F	#6	#6	#14	#14	-TE CONTROL	-TE CONTROL	#6	#6	#14	#14	-TE CONTROL	-TE CONTROL
G	#7	#7	#15	#15	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac	#7	#7	#15	#15	⊕DNA CONTROL Xcv	⊕DNA CONTROL Xcv
H	#8	#8	#16	#16	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac	#8	#8	#16	#16	⊕DNA CONTROL Xcv	⊕DNA CONTROL Xcv

FIG. 4c

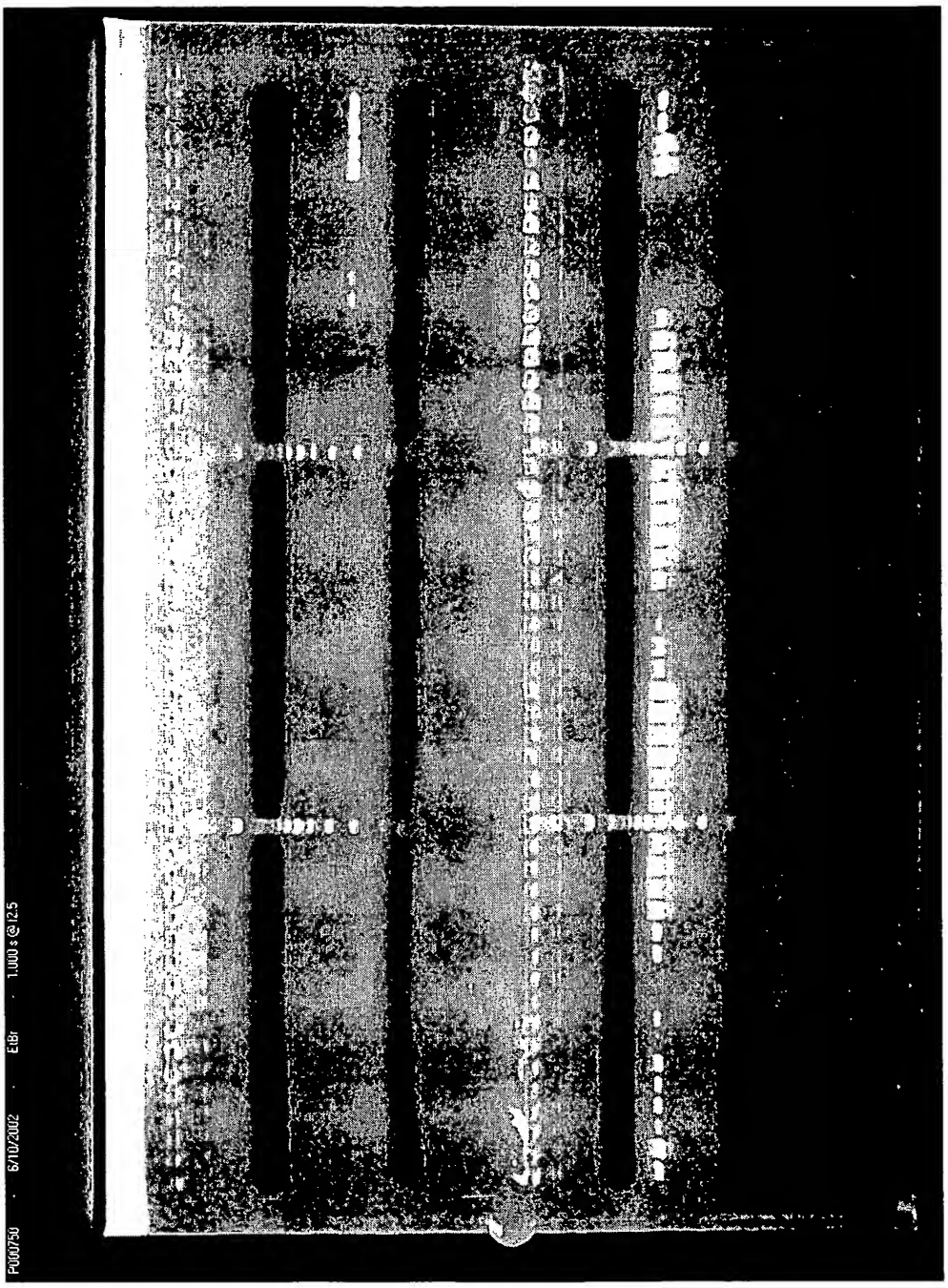

FIG. 5a

Bacterial Fruit Blotch

Disease screen assay data sheet
WFB PCR # 981

Electrophoresis information
Gel Concentration: 2.0% Buffer: 0.5X TBE Amount of agarose used;
Volts: 98 Watts: 9 mAmps: 92 2.5g, 5.0g, (7.0g), other____
On: 1:30 Off: 3:00 Temp: RT (circle one)

Volume of DNA sample: 5µls Total reaction volume: 50µls

Gel Lane	Aac Result	Xcv Result	Gel Lane	Aac Result	Xcv Result	Gel Lane	Aac Result	Xcv Result
1. 1 Aac Rxns	-		37. 17	-		73. 11		+
2. 1	-		38. 18	-		74. 11		+
3. 2	-		39. 18	-		75. 12		+
4. 2	-		40. 19	-		76. 12		+
5. 3	-		41. 19	-		77. 13		+
6. 3	-		42. 20	+		78. 13		-
7. 4	-		43. 20	+		79. 14		-
8. 4	-		44. H_2O	-		80. 14		+
9. 5	-		45. H_2O	-		81. 15		+
10. 5	-					82. 15		+
11. 6	-		46. TE	-		83. 16		+
12. 6	-		47. TE	-		84. 16		+
13. 7	-		48. DNA Hi	+		85. Ladder		
14. 7	-		49. DNA Hi	+		86. N/A		
15. 8	-		50. DNA Low	+		87. 17		+
16. 8	-		51. DNA Low	+		88. 17		+
17. Ladder			52. 1		+	89. 18		+
18. 9	-		53. 1		+	90. 18		+
19. 9	-		54. 2		+	91. 19		+
20. 10	-		55. 2		+	92. 19		+
21. 10	-		55. 3		+	93. 20		-
22. 11	-		57. 3		+	94. 20		-
23. 11	-		58. 4		+	95. H_2O		-
24. 12	-		59. 4		+	96. H_2O		-
25. 12	-		60. 5		+			
26. 13	-		61. 5		+	97. TE		-
27. 13	-		62. 6		+	98. TE		-
28. 14	-		63. 6		+	99. DNA Hi		+
29. 14	-		64. 7		+	100. DNA Hi		+
30. 15	-		65. 7		+	101. DNA Low		+
31. 15	-		66. 8		+	102. DNA Low		+
32. 16	-		67. 8		+	103.		
33. 16	-		68. Ladder			104.		
34. Ladder			69. 9		+	105.		
35. N/A			70. 9		+	106.		
36. 17	-		71. 10		+			
			72. 10		+			

Note: All samples are tested at a 1:50 dilution of the recovered (stock) DNA. NTC is a No Template Control

Sample#'s	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12	13 & 14	15 & 16	17 & 18
Positive									
Negative	✓	✓	✓	✓	✓	✓	✓	✓	✓

BFB-PCR SEED HEALTH TESTING-50RXNS (20 SAMPLES)

PCR #: 981

FIG. 5b

ACIDOVORAX REACTIONS

XANTHOMONAS REACTIONS

	1	2	3	4	5	6	7	8	9	10	11	12
A	#1	#1	#9	#9	#17	#17	#1	#1	#9	#9	#17	#17
B	#2	#2	#10	#10	#18	#18	#2	#2	#10	#10	#18	#18
C	#3	#3	#11	#11	#19 SEED CONTROL	#19 SEED CONTROL	#3	#3	#11	#11	#19 SEED CONTROL	#19 SEED CONTROL
D	#4	#4	#12	#12	#20 SEED CONTROL	#20 SEED CONTROL	#4	#4	#12	#12	#20 SEED CONTROL	#20 SEED CONTROL
E	#5	#5	#13	#13	-H_2O CONTROL	-H_2O CONTROL	#5	#5	#13	#13	-H_2O CONTROL	-H_2O CONTROL
F	#6	#6	#14	#14	-TE CONTROL	-TE CONTROL	#6	#6	#14	#14	-TE CONTROL	-TE CONTROL
G	#7	#7	#15	#15	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac	#7	#7	#15	#15	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac
H	#8	#8	#16	#16	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac	#8	#8	#16	#16	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac

FIG. 5c

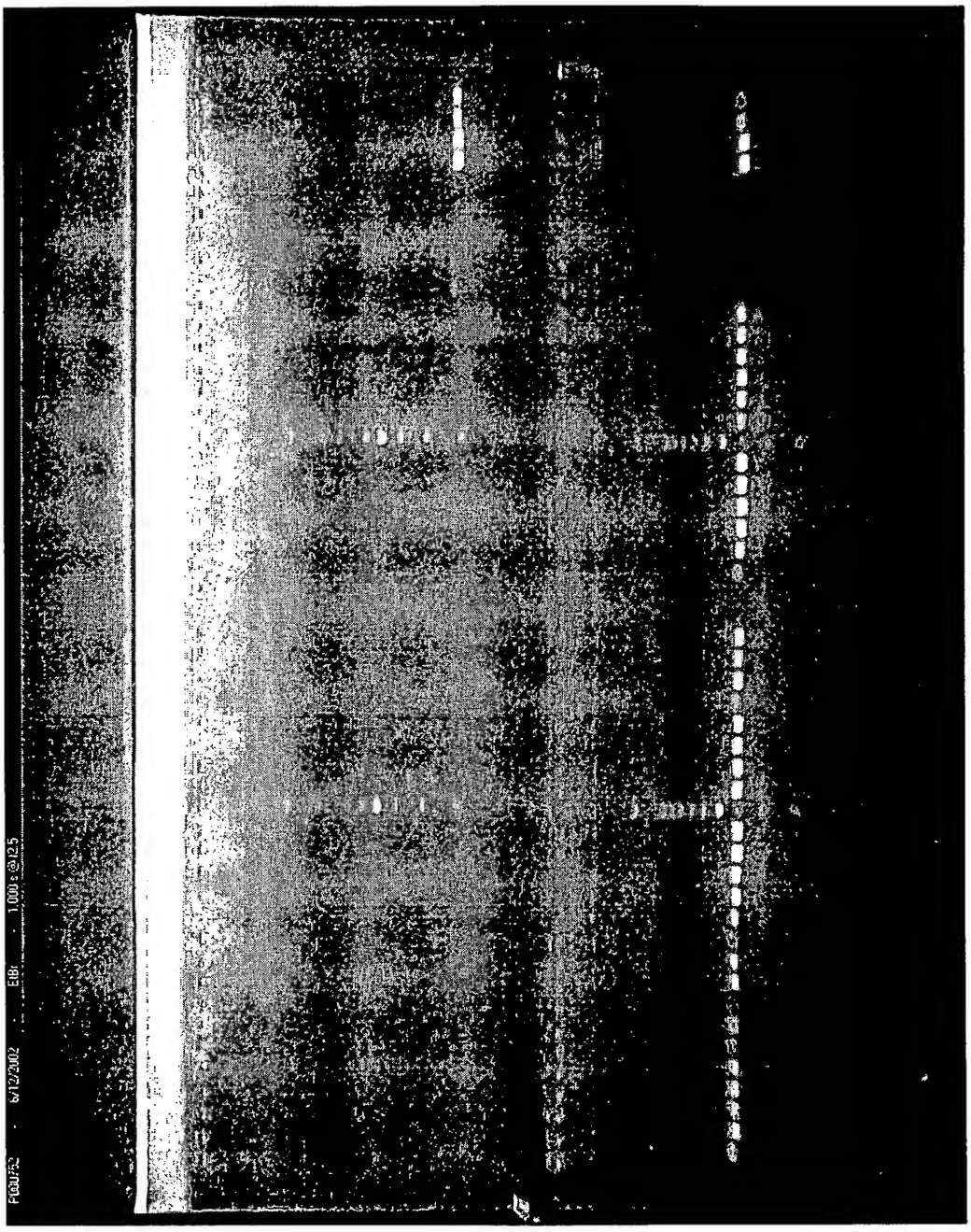

FIG. 6a

Bacterial Fruit Blotch

Disease screen assay data sheet
WFB PCR # 984

Electrophoresis information
Gel Concentration: 2.0% Buffer: 0.5X TBE Amount of agarose used; 2.5g, 5.0g, (7.0g), other____ (circle one)
Volts: 100 Watts: 8 mAmps: 98
On: 1:15 Off: 2:45 Temp: RT

Volume of DNA sample: 5µls Total reaction volume: 50µls

Gel Lane	Aac Result	Xcv Result	Gel Lane	Aac Result	Xcv Result	Gel Lane	Aac Result	Xcv Result
1. 1 Aac Rxns	-		37. 17	-		73. 11		+
2. 1	-		38. 18	-		74. 11		+
3. 2	-		39. 18	-		75. 12		+
4. 2	-		40. 19	-		76. 12		+
5. 3	-		41. 19	-		77. 13		+
6. 3	-		42. 20	+		78. 13		+
7. 4	-		43. 20	+		79. 14		+
8. 4	-		44. H_2O	-		80. 14		+
9. 5	-		45. H_2O	-		81. 15		+
10. 5	-					82. 15		+
11. 6	+		46. TE	-		83. 16		+
12. 6	-		47. TE	-		84. 16		+
13. 7	-		48. DNA Hi	+		85. Ladder		
14. 7	+		49. DNA Hi	+		86. N/A		
15. 8	-		50. DNA Low	+		87. 17		+
16. 8	+		51. DNA Low	+		88. 17		+
17. Ladder			52. 1		+	89. 18		+
18. 9	-		53. 1		+	90. 18		+
19. 9	-		54. 2		+	91. 19		+
20. 10	-		55. 2		+	92. 19		+
21. 10	-		55. 3		+	93. 20		-
22. 11	-		57. 3		+	94. 20		-
23. 11	-		58. 4		+	95. H_2O		-
24. 12	-		59. 4		+	96. H_2O		-
25. 12	-		60. 5		+			
26. 13	-		61. 5		+	97. TE		-
27. 13	-		62. 6		+	98. TE		-
28. 14	+		63. 6		+	99. DNA Hi		+
29. 14	+		64. 7		+	100. DNA Hi		+
30. 15	+		65. 7		+	101. DNA Low		+
31. 15	+		66. 8		+	102. DNA Low		+
32. 16	-		67. 8		+	103.		
33. 16	-		68. Ladder			104.		
34. Ladder			69. 9		+	105.		
35. N/A			70. 9		+	106.		
36. 17	-		71. 10		+			
			72. 10		+			

Note: All samples are tested at a 1:50 dilution of the recovered (stock) DNA. NTC is a No Template Control

Sample#'s	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12	13 & 14	15 & 16	17 & 18
Positive			✓	✓			✓	✓	
Negative	✓	✓			✓	✓			✓

BFB-PCR SEED HEALTH TESTING-50RXNS (20 SAMPLES)

PCR #: 984

FIG. 6b

ACIDOVORAX REACTIONS

XANTHOMONAS REACTIONS

	1	2	3	4	5	6	7	8	9	10	11	12
A	#1	#1	#9	#9	#17	#17	#1	#1	#9	#9	#17	#17
B	#2	#2	#10	#10	#18	#18	#2	#2	#10	#10	#18	#18
C	#3	#3	#11	#11	#19 SEED CONTROL	#19 SEED CONTROL	#3	#3	#11	#11	#19 SEED CONTROL	#19 SEED CONTROL
D	#4	#4	#12	#12	#20 SEED CONTROL	#20 SEED CONTROL	#4	#4	#12	#12	#20 SEED CONTROL	#20 SEED CONTROL
E	#5	#5	#13	#13	-H_2O CONTROL	-H_2O CONTROL	#5	#5	#13	#13	-H_2O CONTROL	-H_2O CONTROL
F	#6	#6	#14	#14	-TE CONTROL	-TE CONTROL	#6	#6	#14	#14	-TE CONTROL	-TE CONTROL
G	#7	#7	#15	#15	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac	#7	#7	#15	#15	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac
H	#8	#8	#16	#16	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac	#8	#8	#16	#16	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac

FIG. 6c

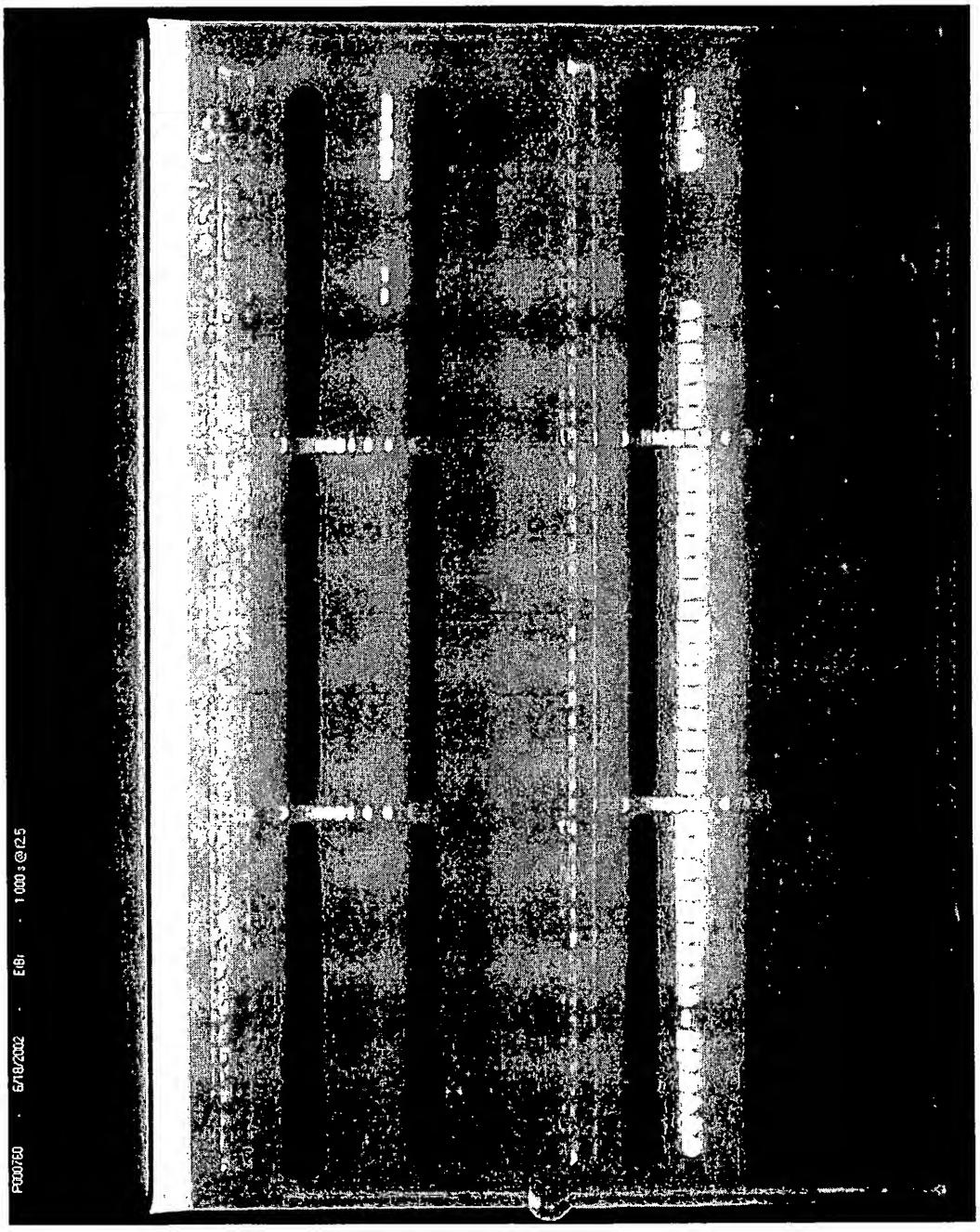

FIG. 7a

Bacterial Fruit Blotch

Disease screen assay data sheet

WFB PCR # 987

Electrophoresis information

Gel Concentration: 2.0% Buffer: 0.5X TBE Amount of agarose used; 2.5g, 5.0g, (7.0g), other____ (circle one)

Volts: 100 Watts: 9 mAmps: 98

On: 2:00 Off: 3:30 Temp: RT

Volume of DNA sample: 5µls Total reaction volume: 50µls

Gel Lane	Aac Result	Xcv Result	Gel Lane	Aac Result	Xcv Result	Gel Lane	Aac Result	Xcv Result
1. 1 Aac Rxns	-		37. 17	+		73. 11		+
2. 1	-		38. 18	+		74. 11		+
3. 2	-		39. 18	+		75. 12		+
4. 2	-		40. 19	-		76. 12		+
5. 3	+		41. 19	-		77. 13		+
6. 3	+		42. 20	+		78. 13		+
7. 4	+		43. 20	+		79. 14		+
8. 4	+		44. H_2O	-		80. 14		+
9. 5	+		45. H_2O	-		81. 15		+
10. 5	+					82. 15		+
11. 6	+		46. TE	-		83. 16		+
12. 6	+		47. TE	-		84. 16		+
13. 7	-		48. DNA Hi	+		85. Ladder		
14. 7	-		49. DNA Hi	+		86. N/A		
15. 8	-		50. DNA Low	+		87. 17		+
16. 8	-		51. DNA Low	+		88. 17		+
17. Ladder			52. 1		+	89. 18		+
18. 9	-		53. 1		+	90. 18		+
19. 9	-		54. 2		+	91. 19		+
20. 10	-		55. 2		+	92. 19		+
21. 10	-		55. 3		+	93. 20		-
22. 11	+		57. 3		+	94. 20		-
23. 11	+		58. 4		+	95. H_2O		-
24. 12	-		59. 4		+	96. H_2O		-
25. 12	-		60. 5		+			
26. 13	-		61. 5		+	97. TE		-
27. 13	-		62. 6		+	98. TE		-
28. 14	-		63. 6		+	99. DNA Hi		+
29. 14	-		64. 7		+	100. DNA Hi		+
30. 15	+		65. 7		+	101. DNA Low		+
31. 15	+		66. 8		+	102. DNA Low		+
32. 16	+		67. 8		+	103.		
33. 16	+		68. Ladder			104.		
34. Ladder			69. 9		+	105.		
35. N/A			70. 9		+	106.		
36. 17	+		71. 10		+			
			72. 10		+			

Note: All samples are tested at a 1:50 dilution of the recovered (stock) DNA. NTC is a No Template Control

Sample#'s	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12	13 & 14	15 & 16	17 & 18
Positive		✓	✓			✓		✓	✓
Negative	✓			✓	✓		✓		

FIG. 9c

BFB-PCR SEED HEALTH TESTING-50RXNS (20 SAMPLES)

PCR #: 984

FIG. 7b

ACIDOVORAX REACTIONS

XANTHOMONAS REACTIONS

	1	2	3	4	5	6	7	8	9	10	11	12
A	#1	#1	#9	#9	#17	#17	#1	#1	#9	#9	#17	#17
B	#2	#2	#10	#10	#18	#18	#2	#2	#10	#10	#18	#18
C	#3	#3	#11	#11	#19 SEED CONTROL	#19 SEED CONTROL	#3	#3	#11	#11	#19 SEED CONTROL	#19 SEED CONTROL
D	#4	#4	#12	#12	#20 SEED CONTROL	#20 SEED CONTROL	#4	#4	#12	#12	#20 SEED CONTROL	#20 SEED CONTROL
E	#5	#5	#13	#13	-H_2O CONTROL	-H_2O CONTROL	#5	#5	#13	#13	-H_2O CONTROL	-H_2O CONTROL
F	#6	#6	#14	#14	-TE CONTROL	-TE CONTROL	#6	#6	#14	#14	-TE CONTROL	-TE CONTROL
G	#7	#7	#15	#15	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac	#7	#7	#15	#15	⊕DNA CONTROL Xcv	⊕DNA CONTROL Xcv
H	#8	#8	#16	#16	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac	#8	#8	#16	#16	⊕DNA CONTROL Xcv	⊕DNA CONTROL Xcv

FIG. 7c

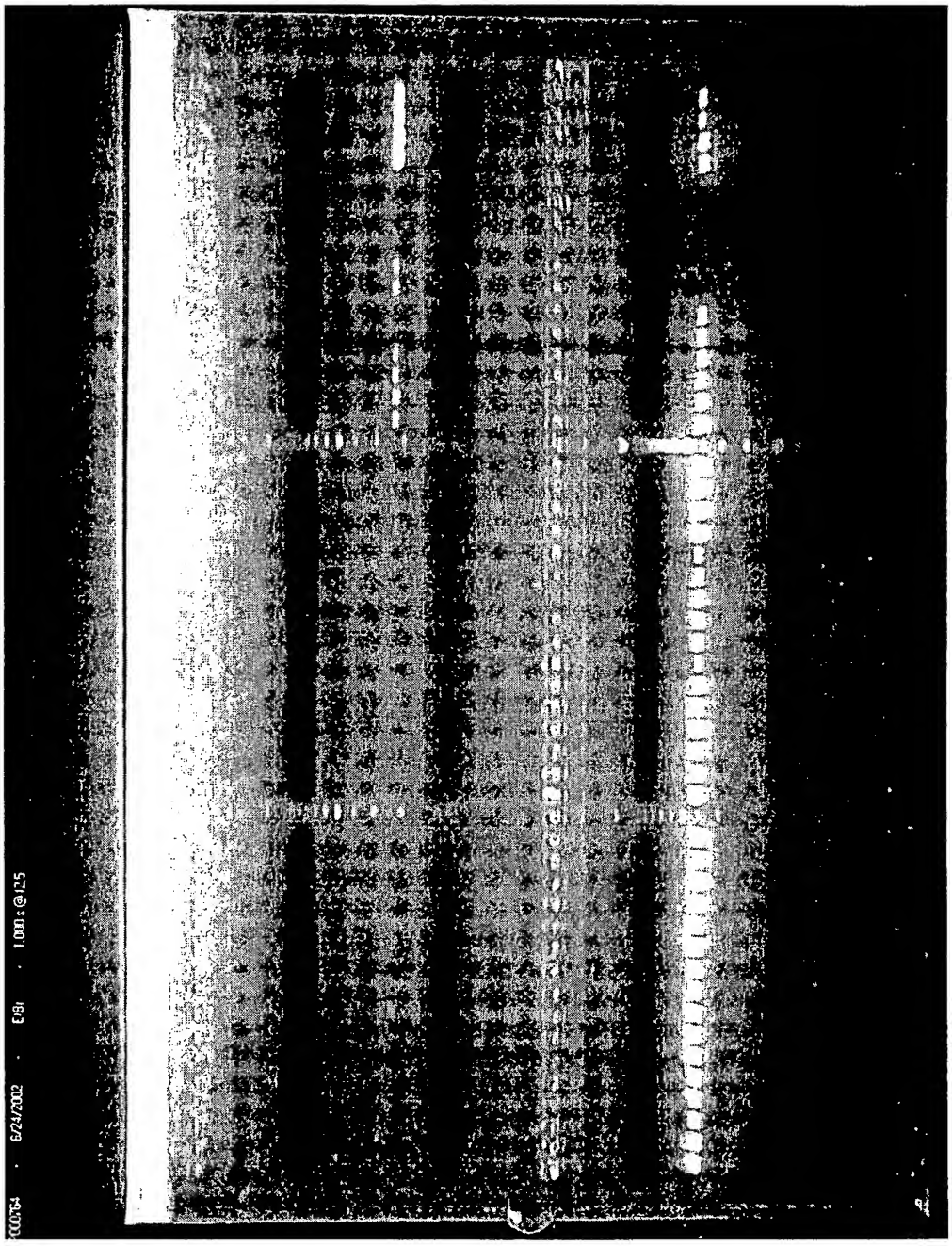

FIG. 8a

Bacterial Fruit Blotch

Disease screen assay data sheet

WFB PCR # 993

Electrophoresis information

Gel Concentration: 2.0% Buffer: 0.5X TBE Amount of agarose used; 2.5g, 5.0g, 7.0g, other 12g/600ml Run gel together with PCR #99 (circle one)

Volts: 130 Watts: 15 mAmps: 117

On: 1:40 Off: 3:00 Temp: RT

Volume of DNA sample: 5µls Total reaction volume: 50µls

Gel Lane	Aac Result	Xcv Result	Gel Lane	Aac Result	Xcv Result	Gel Lane	Aac Result	Xcv Result
1. 1 Aac Rxns	+		37. 17	-		73. 11		+
2. 1	+		38. 18	-		74. 11		+
3. 2	+		39. 18	-		75. 12		+
4. 2	+		40. 19	-		76. 12		+
5. 3	-		41. 19	-		77. 13		+
6. 3	-		42. 20	+		78. 13		+
7. 4	+		43. 20	+		79. 14		+
8. 4	+		44. H_2O	-		80. 14		+
9. 5	+		45. H_2O	-		81. 15		+
10. 5	-					82. 15		+
11. 6	+		46. TE	-		83. 16		+
12. 6	+		47. TE	-		84. 16		+
13. 7	+		48. DNA Hi	+		85. Ladder		
14. 7	+		49. DNA Hi	+		86. N/A		
15. 8	-		50. DNA Low	+		87. 17		+
16. 8	+		51. DNA Low	+		88. 17		+
17. Ladder			52. 1		+	89. 18		+
18. 9	-		53. 1		+	90. 18		+
19. 9	-		54. 2		+	91. 19		+
20. 10	-		55. 2		+	92. 19		+
21. 10	-		55. 3		+	93. 20		-
22. 11	-		57. 3		+	94. 20		-
23. 11	-		58. 4		+	95. H_2O		-
24. 12	-		59. 4		+			
25. 12	-		60. 5		+	96. H_2O		-
26. 13	-		61. 5		+			
27. 13	-		62. 6		+	97. TE		-
28. 14	-		63. 6		+	98. TE		-
29. 14	-		64. 7		+	99. DNA Hi		+
30. 15	-		65. 7		+	100. DNA Hi		+
31. 15	-		66. 8		+	101. DNA Low		+
32. 16	-		67. 8		+	102. DNA Low		+
33. 16	-		68. Ladder			103.		
34. Ladder			69. 9		+	104.		
35. N/A			70. 9		+	105.		
36. 17	-		71. 10		+	106.		
			72. 10		+			

Note: All samples are tested at a 1:50 dilution of the recovered (stock) DNA. NTC is a No Template Control

Sample#'s	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12	13 & 14	15 & 16	17 & 18
Positive	✓	✓	✓	✓					
Negative					✓	✓	✓	✓	✓

BFB-PCR SEED HEALTH TESTING-50RXNS (20 SAMPLES)

PCR #: 993

FIG. 8b

ACIDOVORAX REACTIONS

XANTHOMONAS REACTIONS

	1	2	3	4	5	6	7	8	9	10	11	12
A	#1	#1	#9	#9	#17	#17	#1	#1	#9	#9	#17	#17
B	#2	#2	#10	#10	#18	#18	#2	#2	#10	#10	#18	#18
C	#3	#3	#11	#11	#19 SEED CONTROL	#19 SEED CONTROL	#3	#3	#11	#11	#19 SEED CONTROL	#19 SEED CONTROL
D	#4	#4	#12	#12	#20 SEED CONTROL	#20 SEED CONTROL	#4	#4	#12	#12	#20 SEED CONTROL	#20 SEED CONTROL
E	#5	#5	#13	#13	-H_2O CONTROL	-H_2O CONTROL	#5	#5	#13	#13	-H_2O CONTROL	-H_2O CONTROL
F	#6	#6	#14	#14	-TE CONTROL	-TE CONTROL	#6	#6	#14	#14	-TE CONTROL	-TE CONTROL
G	#7	#7	#15	#15	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac	#7	#7	#15	#15	⊕DNA CONTROL Xcv	⊕DNA CONTROL Xcv
H	#8	#8	#16	#16	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac	#8	#8	#16	#16	⊕DNA CONTROL Xcv	⊕DNA CONTROL Xcv

FIG. 8c

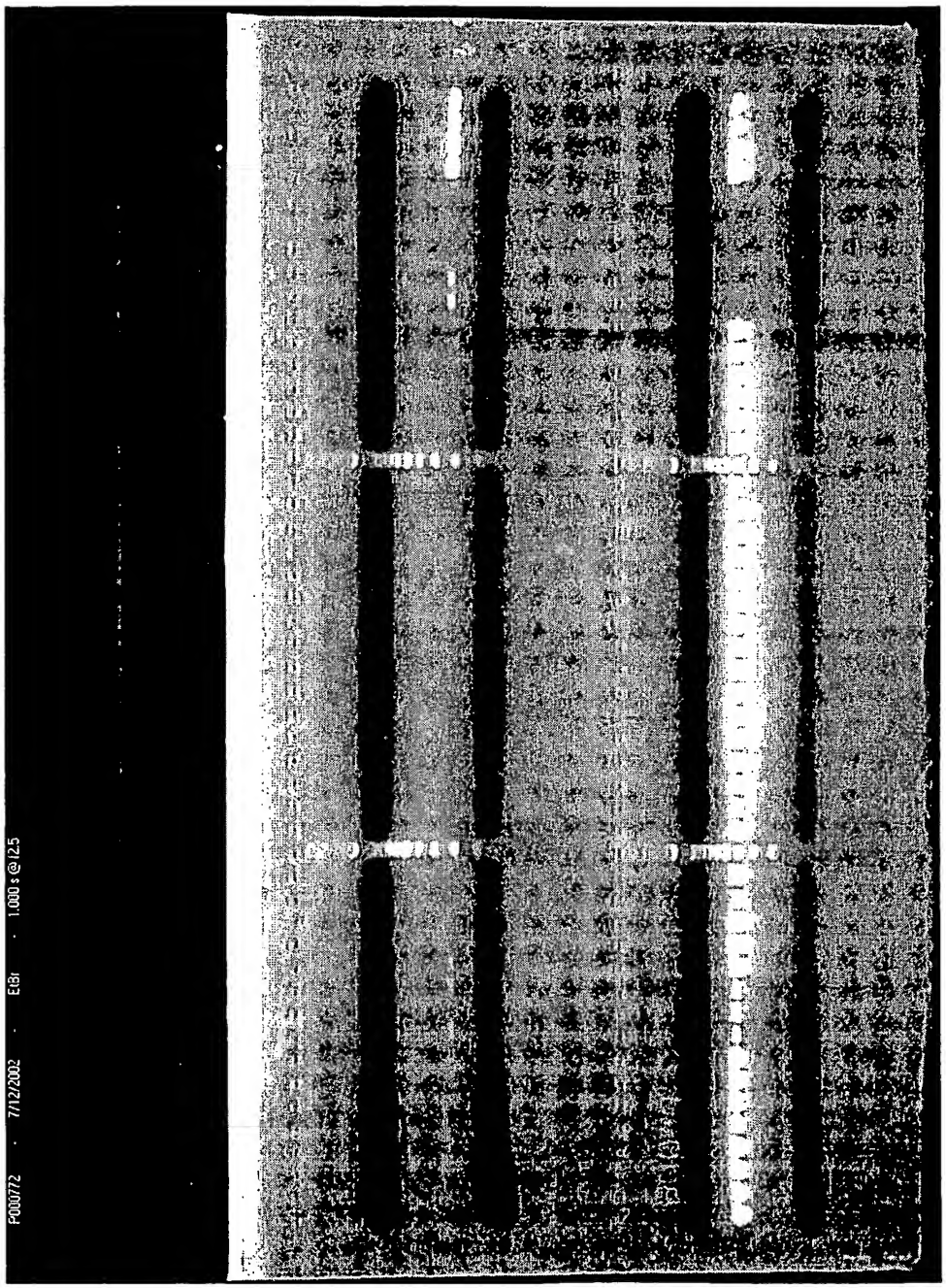

FIG. 9a

Bacterial Fruit Blotch

Disease screen assay data sheet

WFB PCR # 976

Electrophoresis information

Gel Concentration: 2.0% Buffer: 0.5X TBE Amount of agarose used; 2.5g, 5.0g, (7.0g), other____ (circle one)

Volts: 98 Watts: 8 mAmps: 92

On: 1:30 Off: 3:00 Temp: RT

Volume of DNA sample: 5µls Total reaction volume: 50µls

Gel Lane	Aac Result	Xcv Result	Gel Lane	Aac Result	Xcv Result	Gel Lane	Aac Result	Xcv Result
1. 1 Aac Rxns	-		37. 17	-		73. 11		+
2. 1	-		38. 18	-		74. 11		+
3. 2	-		39. 18	-		75. 12		+
4. 2	-		40. 19	-		76. 12		+
5. 3	-		41. 19	-		77. 13		+
6. 3	-		42. 20	+		78. 13		+
7. 4	-		43. 20	+		79. 14		+
8. 4	-		44. H_2O	-		80. 14		+
9. 5	-		45. H_2O	-		81. 15		+
10. 5	-					82. 15		+
11. 6	-		46. TE	-		83. 16		+
12. 6	-		47. TE	-		84. 16		+
13. 7	-		48. DNA Hi	+		85. Ladder		
14. 7	-		49. DNA Hi	+		86. N/A		
15. 8	-		50. DNA Low	+		87. 17		+
16. 8	-		51. DNA Low	+		88. 17		+
17. Ladder			52. 1		+	89. 18		+
18. 9	-		53. 1		+	90. 18		+
19. 9	-		54. 2		+	91. 19		+
20. 10	-		55. 2		+	92. 19		+
21. 10	-		55. 3		+	93. 20		-
22. 11	-		57. 3		+	94. 20		-
23. 11	-		58. 4		+	95. H_2O		-
24. 12	-		59. 4		+			
25. 12	-		60. 5		+	96. H_2O		-
26. 13	-		61. 5		+			
27. 13	-		62. 6		+	97. TE		-
28. 14	-		63. 6		+	98. TE		-
29. 14	-		64. 7		+	99. DNA Hi		+
30. 15	-		65. 7		+	100. DNA Hi		+
31. 15	-		66. 8		+	101. DNA Low		+
32. 16	-		67. 8		+	102. DNA Low		+
33. 16	-		68. Ladder			103.		
34. Ladder			69. 9		+	104.		
35. N/A			70. 9		+	105.		
36. 17	-		71. 10		+	106.		
			72. 10		+			

Note: All samples are tested at a 1:50 dilution of the recovered (stock) DNA. NTC is a No Template Control

Sample#'s	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12	13 & 14	15 & 16	17 & 18
Positive									
Negative	✓	✓	✓	✓	✓	✓	✓	✓	✓

BFB-PCR SEED HEALTH TESTING-50RXNS (20 SAMPLES)

PCR #: 976

FIG. 9b

ACIDOVORAX REACTIONS

XANTHOMONAS REACTIONS

	1	2	3	4	5	6	7	8	9	10	11	12
A	#1	#1	#9	#9	#17	#17	#1	#1	#9	#9	#17	#17
B	#2	#2	#10	#10	#18	#18	#2	#2	#10	#10	#18	#18
C	#3	#3	#11	#11	#19 SEED CONTROL	#19 SEED CONTROL	#3	#3	#11	#11	#19 SEED CONTROL	#19 SEED CONTROL
D	#4	#4	#12	#12	#20 SEED CONTROL	#20 SEED CONTROL	#4	#4	#12	#12	#20 SEED CONTROL	#20 SEED CONTROL
E	#5	#5	#13	#13	-H_2O CONTROL	-H_2O CONTROL	#5	#5	#13	#13	-H_2O CONTROL	-H_2O CONTROL
F	#6	#6	#14	#14	-TE CONTROL	-TE CONTROL	#6	#6	#14	#14	-TE CONTROL	-TE CONTROL
G	#7	#7	#15	#15	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac	#7	#7	#15	#15	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac
H	#8	#8	#16	#16	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac	#8	#8	#16	#16	⊕DNA CONTROL Aac	⊕DNA CONTROL Aac